

Listing of claims in the Application

This Listing of Claims replaces, without prejudice, all previous listing and versions of the claims in the Application.

1. (Currently amended) Method of obtaining 2-mercaptobenzothiazole from a melt of the raw product prepared by the reaction of aniline, carbon disulphide and sulphur by pressure synthesis in a reactor, where the melt contains 2-mercaptobenzothiazole, unreacted raw materials, intermediate products and pitches, characterized in that after reaching a stationary state of the reaction medium it includes the following steps:

a) crystallization of the 2-mercaptobenzothiazole raw product from an aniline solution,

b) dividing the liquid phase (F_K) from crystallization from step a) in three parts (F_{K1}) , (F_{K2}) , (F_{K3}) ,

c) removing one part of the liquid phase (F_{K1}) from crystallization ~~from step a)~~ out of the process,

d) returning the second part of the liquid phase (F_{K2}) from crystallization ~~from step a)~~ into the reactor for preparation of the raw product and supplementing it with sulphur and carbon disulphide with respect to aniline,

e) final purification of the crystallized 2-mercaptobenzothiazole from step a) in the aniline liquid phase and separation of the pure product 2-mercaptobenzothiazole from the liquid phase (F_P) from the purification,

f) using the third part of the liquid phase (F_{K3}) from crystallization ~~from step a)~~, supplemented with the liquid phase (F_R) from final purification from step e) and possibly with aniline for crystallization of a further batch of the 2-mercaptobenzothiazole raw product, as in step a)

~~g) using the liquid phase (F_R) from final purification from step f), together with a part of the liquid phase (F_{K3}) from step e), possibly with aniline, for crystallization of the 2-mercaptobenzothiazole raw product,~~

h) repeating steps a) to g) f).

2. (Original) Method according to claim 1, characterized in that in the step c) 5 to 20 % of the liquid phase from crystallization are removed.
3. (Original) Method according to claim 1, characterized in that the crystallization of the 2-mercaptobenzothiazole raw product is performed from the aniline liquid phase from the preceding crystallization and/or from the aniline liquid phase from final purification and/or from pure aniline.
4. (Original) Method according to claim 1, characterized in that the aniline liquid phase in step f) for final purification of 2-mercaptobenzothiazole is pure aniline or regenerated aniline or aniline liquid phase from the preceding final purification or a solution of 2-mercaptobenzothiazole in aniline or any combination thereof.
5. (Original) Method according to claim 4, characterized in that the aniline liquid phase in step f) for final purification of 2-mercaptobenzothiazole is a saturated solution of 2-mercaptobenzothiazole in aniline.
6. (Original) Method according to claim 1, characterized in that 2-mercaptobenzothiazole obtained in step a) is finally purified by wash separation.
7. (Original) Method according to claim 1, characterized in that 2-mercaptobenzothiazole obtained in step a) is finally purified by washing.
8. (Original) Method according to claim 7, characterized in that 2-mercaptobenzothiazole obtained in step a) is finally purified by washing on a filter.
9. (Original) Method according to claim 7, characterized in that 2-mercaptobenzothiazole obtained in step a) is finally purified by washing in a centrifuge.